

# *QUERCUS PYRENAICA* COPPICES I: SCARCE ACORN YIELD IS NOT RELATED TO CLONAL SIZE

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*Quercus pyrenaica* Willd. is a western Mediterranean/Atlantic species which current core of distribution is the Iberian Peninsula. The species has the specific ability to regenerate profusely from the entire root system after above-ground biomass removal by ecological disturbances. Its regenerative capacity was made use of in traditionally managed coppices, maintained along centuries mainly for charcoal, but also for firewood and woody pasture production. After the abandonment of coppicing in the 70's, jointly to the derived ecological, economical and social problems, these woodlands present marked levels of degradation, evidenced by low wood and acorn production. Especially, lack of fructification is one of the major hinders for woodland preservation, and its avoidance is one of the pursued aims of the most recommended alternative management. Sadly, the few experimental attempts to high forest conversion by thinning were not successful in this sense. Our former genetic analyses performed in several abandoned coppices showed surprising high levels of genetic diversity, helping to infer that despite coppicing promotes vegetative reproduction, trees acting as seed sources and seedling establishment had to be historically common. We have recorded acorn production of 20 trees (10 bearing unique genotypes and 10 belonging to clonal clumps) in an open parkland during three years. Results showed high inter-individual and inter-annual variability. The absence of a differentiation pattern hinders to explain neither the generalized lack of fructification in coppice stands of the species nor the existence of a trade-off independent of resources availability between sexual and asexual reproduction.